

"But now comes a very important practical question. There can be no doubt that the packing process produces considerable constitutional disturbance. Under what circumstances should this treatment be adopted, and under what conditions is it not practicable? Every one who has had much to do with this disease must be conscious of the anxiety which it gives him when the temperature exceeds  $105^{\circ}$  or  $106^{\circ}$ , and especially when it is associated with the least sign of cerebral disturbance; and, as my treatment consists in elevating the temperature, it will be apparent that some care is necessary. Thus, according to my experience, it should not be adopted—1. If the patient suffer from incompetency of the aortic valves; 2. If there be much fluid in the pericardium from previous inflammation; 3. If the temperature be over  $104^{\circ}$ ; 4. If the skin be hot, dry, and harsh, without the least tendency to sweating; 5. If there be extreme nervous prostration from habits of drunkenness or other vitiating cause; 6. If the patient be pregnant.

"Again: during the time the patient is packed, the following points must be observed: 1. If, after two or three hours, the patient become very restless, with a dry non-perspirable skin, I should advise the treatment to be discontinued; also when the temperature exceeds  $105^{\circ}$ ; 2. If the temperature do not rise, and the patient be sweating freely, give half an ounce, or even an ounce, of brandy every hour in warm milk and water. Thus we have to secure profuse sweating and a mean temperature of  $104^{\circ}$ ; we have to guard against a dry skin and a temperature over  $105^{\circ}$ .

"Let us consider this a little more practically. If a healthy child be packed for six hours as directed, whose normal temperature is  $99^{\circ}$ , we find that it will only rise one degree during the whole course of the six hours, and the administration of a stimulant will not cause it to rise any more. It is very different during the pyrexial stage of acute rheumatism, and I have proved most unquestionably that, when the packing alone does not increase the temperature, this is easily brought about by giving brandy in the manner just stated. I have adopted this treatment with excellent results in cases where there has been, in addition to the rheumatic inflammation, a mitral murmur, pericarditis, and pleuropneumonia. In some cases I give medicine; in others I do not. My rule is this: not to give medicine or solid food until after the third packing, and this means not until the acute symptoms have subsided and the temperature is down to  $100^{\circ}$ ; then some vegetable tonic, with solution of acetate of ammonia, is to be preferred to large doses of alkali or quinine. If, however, the case have been of long duration before coming under treatment, and if it be the third or fourth attack, with probably cardiac disease, then of course the orthodox measures must be resorted to for such complications. If the temperature should run very high, with tendency to delirium, I believe the best plan is in every instance, whether under the packing treatment or otherwise, to apply ice to the head, expose the body freely to a current of cold air, and sponge it over lightly with a mixture of one part of spirit to two of water, until the temperature falls; then to discontinue this, and to apply a sinapism to the epigastrium. The following case occurred in my practice, from which a lesson might, perhaps, be learned. A young robust woman, aged 19, came under my care with incipient acute rheumatism, but with a dry harsh skin and a temperature of  $102^{\circ}$ . I had her packed in the usual manner at 1.30 P. M.; at 4.30 P. M., there was no action of the skin; temperature  $104^{\circ}$ ; at 6.30 P. M., still no action of the skin; temperature  $106.2^{\circ}$ ; rapid action of the heart and tendency to delirium. I at once applied ice to the head; bathed the exposed body with spirit and water, and in twenty minutes I was pleased to find the temperature down to  $103^{\circ}$ ; the following morning it was  $101^{\circ}$ ."

23. *Cold Baths in Cerebral Rheumatism.*—M. RAYNAUD reports the case of a very strong, vigorous, and sober man, aged 32, who was attacked by rheumatism affecting many of the joints. Two days afterwards the pains left him entirely, but very serious cerebral symptoms came on; and in two days, when M. Raynaud saw the patient, the pulse was 120 and the rectal temperature  $104.9$  Fahr. M. Raynaud bled him to more than two pounds, but the temperature and pulse still remained high. M. Raynaud, therefore, ordered cold baths.

One a little above 60 deg. Fahr., was ordered to be given, at 11.28 A. M., to last half an hour. When the patient left the bath, his temperature had fallen to 100 deg. Fahr., his pulse to 76, and consciousness, which had been lost, seemed returning. At 3.30 P. M., the temperature rose to 101.66 Fahr. Another half hour's bath was ordered, during which the exhaustion was considerable. After the bath, the rectal temperature was 97.5 Fahr. At 8.30 P. M., the temperature reached 100.4 deg. Fahr. Another bath was given, after which the rectal temperature was 98.8 deg. At 11 P. M., consciousness returned, and the patient passed the night in quiet sleep. On the succeeding day, three cold baths were given, and were followed by a similar lowering of the temperature. At the end of this day's treatment, the patient had regained his consciousness; asked for drink, and slept quietly. On the third day, he had two baths, and a final bath on the fourth day. From that time, the temperature never exceeded 99.14 deg. Fahr., even in the evening, and convalescence set in decidedly. The cerebral symptoms in this case must be attributed to that meningitic form of cerebral rheumatism characterized by the advent of delirium and coma. But the appearance of the meningitic form, in the author's opinion, is purely symptomatic; for it cannot be supposed that an attack of meningitis could be instantly influenced by a cold bath.—*British Med. Journ.*, from *Journal de Thérapeutique*, No. 22, 1874.

24. *Herpes Zoster successfully treated with Zinc Phosphide*.—Dr. J. ASHBURTON THOMPSON relates (*Glasgow Med. Journ.*, Oct. 1874) an interesting case of this. He observes that the decomposition of the phosphide of zinc within the body "affords the effects of free phosphorus; in my opinion, ten parts of zinc phosphide are equivalent in therapeutic effect to one part of the uncombined element. The other phosphides and hypophosphites are not ascertained to afford the effects of free phosphorus. This compound, which, given in a dose of one-third of a grain repeated every two or three hours, is, generally speaking, sufficient to remedy such an attack of neuralgia as accompanied the rash in this case, and was therefore employed in it, is not that which appears to me best adapted for the treatment of other forms of skin disease. Many of these attend upon states in which advantage may be gained from the use of cod-liver oil; and, at the same time, that a solution of solid phosphorus in oil is that form which best insures the absorption of the drug in its free and most active state, this fish oil is that one which alone does not expose the element to changes which are either destructive of its remedial powers, or render it dangerous to the patient. These, therefore, are two reasons for employing in such cases a solution of the drug in cod-oil; a third may be found in the fact that such a solution possesses neither the smell nor the taste of the element. Still, patients are found who will not or cannot take the solvent; under these circumstances, no more elegant or effective means of exhibiting phosphorus exists than a concentrated form of the same solution inclosed in little gelatine envelopes forming what are known as '*perles*.'<sup>1</sup> These, it need scarcely be said, are quite tasteless; and if taken immediately after meals, cause little or no phosphoric eructation.

"The dose of phosphorus which may be given with advantage will vary strictly with the object in view. In the example before us, acting on my knowledge of the treatment most desirable in acute neuralgia, it was attempted at once to induce the stimulant action of the drug, by giving full doses of the zinc-phosphide; and this result being obtained, the disease was cured. So, in the eruptive fevers, it is the stimulant effect of the drug which it is desired to produce, and it must be attempted in the same manner—by exhibiting full doses from the beginning of treatment. As a rule, for this purpose I should be inclined to prefer phosphorus in an alcoholic or ethereal solution, given in a dose equal to one twelfth of a grain, and repeated every four hours. But where the object in view is to give tone to the cutaneous vessels, or to improve

<sup>1</sup> Such capsules have been prepared for me by Messrs. Young & Postans, London, containing various doses of the element. I have found them eminently satisfactory.